

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte YUTAKA NAGAI  
and TOSHIFUMI TAKEUCHI

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Appeal No. 2006-0171  
Application 09/290,251<sup>1</sup>

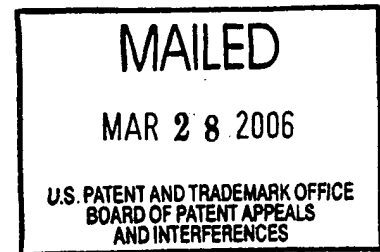
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HEARD: March 7, 2006

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Before BARRETT, BARRY, and BLANKENSHIP, Administrative Patent Judges.

BARRETT, Administrative Patent Judge.



DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1-16 and 24-38.

We reverse.

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<sup>1</sup> Application for patent filed April 13, 1999, entitled "Reproduction Apparatus and Reproduction Method of Digital Video Signal or Audio Signal," claims the foreign filing priority benefit under 35 U.S.C. § 119 of Japanese Application 10-102385, filed April 14, 1998.

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RELATED APPEAL

A decision was entered February 9, 2005, in Appeal No. 2004-1335, in continuation Application 09/712,970. That decision involved different issues and does not control the outcome in this case.

BACKGROUND

The disclosed invention relates to an apparatus and method for preventing reproduction of a pirated audio or video signal as described at pages 4-5 of appellants' brief.

Claim 1 is reproduced below.

1. A reproduction apparatus for reproducing video data and/or audio data from a medium dedicated to reproduction or a recordable medium having video data and/or audio data recorded thereon, the video data and/or audio data being generated by superimposing information concerning copying permission on a signal of digitized video data and/or a signal of digitized audio data or embedding the information therein, said reproduction apparatus comprising:

a reproducing unit which reproduces the information concerning copying permission superimposed on or embedded in the video data and/or audio data;

a determining unit which determines whether the medium to be reproduced is a medium dedicated to reproduction or a recordable medium; and

a stopping unit which stops reproduction in response to the information reproduced by said reproducing unit indicating that copying once was permitted and a result of the determining by said determining unit indicating that the medium is a medium dedicated to reproduction.

THE REFERENCES

The examiner relies on the following references:

Yokota et al. (Yokota)	5,633,841	May 27, 1997
Mardirossian	5,636,096	June 3, 1997
Tozaki et al. (Tozaki)	5,729,516	March 17, 1998
Doi	5,901,125	May 4, 1999 (filed February 6, 1997)
Linnartz	6,209,092	March 27, 2001 (filed January 27, 1998)

Fox, Barry, Wobble drives pirates off the digital seas,  
New Scientist, February 22, 1997, p. 22.

THE REJECTIONS

Claims 1, 4, 6, 8-11, 14, 16, 24, 27, 29, 31-33, 36, and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Linnartz and Doi.

Claims 2, 3, 5, 7, 15, and 25, 26, 28, 30, and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Linnartz, Doi, Tozaki, and Mardirossian.

Claims 12, 13, 34, and 35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Linnartz, Yokota, and Fox.

We refer to the final rejection (pages referred to as "FR\_\_") entered October 31, 2001, and the examiner's answer (pages referred to as (EA\_\_") entered June 18, 2002, for a statement of the examiner's rejection, and to the brief (pages referred to as "Br\_\_") filed April 29, 2002, and reply brief (pages referred to as "RBr\_\_") filed August 19, 2002, for a statement of appellants' arguments thereagainst.

DISCUSSION

Common limitations of the independent claims

All independent claims recite structure/steps for:

(1) determining whether the medium to be reproduced is a medium dedicated to reproduction or a recordable medium; and  
(2) stopping reproduction in response to information indicating that (i) copying once was permitted, and (ii) the medium is a medium dedicated to reproduction. For example, claim 1 recites "a determining unit which determines whether the medium to be reproduced is a medium dedicated to reproduction or a recordable medium; and a stopping unit which stops reproduction in response to the information reproduced by said reproducing unit indicating that copying once was permitted and a result of the determining by said determining unit indicating that the medium is a medium dedicated to reproduction."

Some claims are more detailed about the manner of determining whether the medium is a medium dedicated to reproduction or a recordable medium: (1) claim 8 recites a "medium identification code identifying the medium dedicated to reproduction or the recordable medium" and "a medium identification code detecting circuit detecting the medium identification code," as described at pages 4 and 7 of the specification; (2) claim 11 recites a medium identification code and medium identification code detecting unit as in claim 8 and

"a reflectance detecting unit for detecting reflectance of a disk" and "a determining unit for determining whether the disk is a recordable medium or a medium dedicated to reproduction on the basis of the reflectance of the disk" wherein either "the medium identification code or the determining unit indicates a medium dedicated to reproduction," as described at pages 11-13 of the specification; (3) claim 12 recites "a wobble detecting unit for detecting wobbled grooves existing on a disk" which are indicative of whether the disk is a recordable medium (wobbled grooves) or a medium dedicated to reproduction (no wobbled grooves), as described at pages 9-11 of the specification; and (4) claim 13 recites a combination of detecting wobbled grooves and a medium identification code. For uniformity, we use the spelling "disk" instead of "disc."

Some claims specify more specific ways of stopping reproduction: (1) claim 2 recites "a destroying unit which destroys reproduced data so as to make the video data and/or audio data non-reproducible"; (2) claims 3, 5, and 7 recite "a destroying unit which destroys video data and/or audio data so as to make error detection of video data and/or audio data not yet subjected to error correction processing possible and make error correction thereof impossible"; (3) claim 15 recites "destroying reproduced data so as to make reproduction of the video data and/or audio data impossible and simultaneously judging error

correction to be impossible." The obviousness rejection does not turn on these limitations.

Claims 1, 4, 6, 8-11, 14, 16, 24, 27, 29, 31-33, 36, and 38

The examiner's position and appellants' response are set forth in detail in the final rejection, the brief, the examiner's answer, and the reply brief. Familiarity with the contents of these documents is presumed in the following discussion. Our job is to determine whether the examiner is correct in the findings of fact and legal conclusions of obviousness.

The examiner requests the Board to note that referring to pressed or ROM disks as "media dedicated to reproduction" is questionable when they incorporate features specifically to prevent their content from being reproduced (EA37). Appellants reply that it is highly improper for the examiner to object to the choice of terminology for the first time in the examiner's answer after six previous Office actions (RBr6). Appellants further reply that the term "dedicated to reproduction" is clear and precise and describes a physical characteristic of the medium which does not change depending on whether the medium is allowed to be reproduced or prevented from being reproduced (RBr6-7). We agree with appellants that there is nothing questionable or ambiguous about the term "media dedicated to reproduction" because this is physical characteristic of the medium. If the examiner had doubts about the language, they should have been

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expressed earlier since it is the final rejection that is being reviewed in this appeal under 35 U.S.C. § 134. See In re Webb, 916 F.2d 1553, 1556, 16 USPQ2d 1433, 1435 (Fed. Cir. 1990).

In Appeal No. 2004-1335, we interpreted the phrase "copying once was permitted" to be broad enough to mean either "copying was permitted one time and no more" or "copying was permitted at some indefinite time in the past" (decision, pages 4-5). That interpretation is not at issue in this appeal.

The questions on appeal are whether Linnartz discloses or suggests determining whether a medium is a medium dedicated to reproduction or is a recordable medium and, if so, whether it discloses or suggests stopping reproduction in response to a determination that the medium is a medium dedicated to reproduction in addition to information indicating that copying once was permitted. Linnartz discloses an optional third type of copy-control mark representing a medium mark P which identifies the recording medium as recordable or as a professional disk (col. 5, lines 54-67; col. 6, lines 2-4). The medium mark P is related to the ticket T and the watermark W, such that applying a cryptographic one-way function to P results in T and applying the one-way function n times results in W (col. 6, line 46 to col. 7, line 3). The examiner finds that Linnartz discloses a determining unit which determines if the medium is a recordable medium, but does not expressly disclose determining whether the

medium is dedicated to reproduction or recording (FR3; EA6). The examiner states (EA38) that Linnartz teaches "[t]he player only provides F(T) to the recorder if the player reads from an original disc, i.e., with a valid P matching T" (col. 6, lines 65-67) and "Linnartz teaches that the medium mark, which can indicate whether the medium is recordable or dedicated to reproduction, is used in judging whether to stop reproduction" (EA38). Appellants respond that Linnartz only uses the medium mark P to determine whether the disk is an original disk, not whether the disk is a disk dedicated to reproduction, and stops reproduction if the disk is not an original disk (RBr9).

We agree with appellants. Linnartz discloses that the medium mark P identifies whether the medium is recordable or dedicated to reproduction, but it does not use this property in deciding whether to stop reproduction and therefore does not determine the type of medium. Linnartz only uses the value of the medium mark P in the copy control scheme. The portion of Linnartz relied upon by the examiner deals with the embodiment where "the customer is only allowed to copy directly from the original disc that he bought from the publisher, and the number of such copies is restricted" (col. 6, lines 49-51). Although the medium mark P is used to stop reproduction, P is only used to determine whether the disk is an original disk, not whether it is a disk dedicated to reproduction. While a medium mark P can



indicate whether the medium is recordable or dedicated to reproduction, this portion of Linnartz does not teach using the medium mark P to determine the type of medium.

Figure 4 of Linnartz shows a copy control system using a medium mark P. The medium mark P is coupled to a cryptographic one-way function unit 421 and is compared to the watermark W and the ticket T as part of the circuit to control recording (col. 9, lines 1-27). Nevertheless, the copy control mechanism is based on the value of medium mark P, not on whether P represents a recordable medium or a medium dedicated to reproduction. Linnartz does not state or suggest anywhere that recording is stopped based on the medium mark P indicating a medium dedicated to reproduction. We agree with appellants' argument (RBr12) that Linnartz does not recognize or solve the problem solved by the present invention of preventing reproduction of an illegal copy, i.e., a copy on a medium dedicated to reproduction (which is made by pressing from a master, not recording) having information indicating that copying once was permitted.

The examiner finds that Doi teaches determining whether a medium is dedicated to reproduction or recording (FR3) and concludes that it would have been obvious to include a determining unit which determines whether a medium is dedicated to reproduction or recording as taught by Doi in the apparatus of Linnartz "to stop reproduction in response to a result indicating

that the medium is a medium dedicated to reproduction, for the obvious advantage of limiting the reproduction of proprietary information" (FR4). The examiner's motivation apparently comes from Linnartz's teaching in the background of the invention that it desirable that consumer recorders be able to copy the consumers' own creative productions, but prohibit recording of copyrighted material that originates from professional music publishers and that one method for digital media is the use of "copy bits" in a DCC standard which indicate a copyright status and that the medium is a "professional" medium manufactured by pressing, i.e., a medium dedicated to reproduction (col. 1, lines 54-65). The examiner states that "[i]t is difficult to see what purpose these 'other copy bits' [at col. 1, lines 45-65] may have had, unless to determine whether copying was authorized, or what benefit there was in determining whether copying was authorized, unless unauthorized reproduction was to be stopped" (EA39-40). Appellants argue that this is pure speculation on the examiner's part and the only source for the examiner's conclusion about the purpose of the "other copy bits" is applicants' disclosure (RBr13).

We agree with appellants' argument that the examiner is speculating on the purpose for the "other copy bits," which indicate the type of media. Appellants have gone to the trouble to present a copy of the International Standard IEC 60958-3,

Digital audio interface -- Part 3: Consumer application to which Linnartz apparently refers, and to discuss this standard (Br10-24). We find no teaching in that document that the L-bit corresponding to the "other copy bits" is used to stop reproduction. We find no teaching or suggestion in Linnartz for stopping reproduction based on whether the medium is a medium dedicated to reproduction. This finding is consistent with the statement in our opinion in Appeal No. 2004-1335 (page 10): "None of the independent claims require 'detecting' 'a medium dedicated to reproduction,' but merely recite that a 'medium dedicated to reproduction' [i]s a condition. If there was a step of detecting and taking an action in response to the detecting, there would be a problem in the rejection because the stopping in Linnartz is not based on detecting the type of media."

Doi teaches adjusting the power and wavelength of a read laser in response to determining, based on the reflectance, whether the medium is a medium dedicated to reproduction or a recordable medium (col. 13, line 47 to col. 14, line 13). Appellants also disclose that determining whether a medium is dedicated to reproduction can be done by measuring reflectance (spec. at 12). Nevertheless, Doi does not teach or suggest stopping reproduction as a result of determining that the medium is a medium dedicated to reproduction.

Neither Linnartz nor Doi teaches or suggests stopping reproduction as a result of determining that the medium is a medium dedicated to reproduction, much less stopping reproduction as a result of determining that copying once was permitted and determining that the medium is a medium dedicated to reproduction. Thus, even if the references were combined, they would not teach the claimed invention. Because the independent claims in this group all contain the limitations at issue, the rejection of claims 1, 4, 6, 8-11, 14, 16, 24, 27, 29, 31-33, 36, and 38 is reversed.

Claims 2, 3, 5, 7, 15, 25, 26, 28, 30, and 37

The independent claims in this group all contain the common limitations of determining whether the medium is a medium dedicated to reproduction or a recordable medium and stopping reproduction as a result of determining that copying once was permitted and determining that the medium is a medium dedicated to reproduction, as discussed in the previous group, and contain additional limitations to an error correction unit and a unit to destroy data to make it non-reproducible. The examiner adds Tozaki to teach an error correction unit and Mardirossian to teach destroying data to prevent unauthorized copying (e.g., FR6; EA9). However, the examiner does not rely on Tozaki and Mardirossian to cure the noted deficiencies of Linnartz and Doi and the rejection must be reversed. In addition, we agree with

appellants' arguments (RBr18) that Mardirossian destroys recorded data on a disk and does not meet the claim limitation of "a destroying unit which destroys reproduced data" (emphasis added). Therefore, the rejection of claims 2, 3, 5, 7, 15, 25, 26, 28, 30, and 37 is reversed.

Claims 12, 13, 34, and 35

Independent claims 12 and 13 recite "a wobble detecting unit for detecting wobbled grooves existing on a disk" and a stopping unit for stopping reproduction provided information indicates that copying once was permitted and the "wobble detecting unit does not detect wobbled grooves." Claim 13 provides the alternative condition of stopping reproduction if a medium identification code indicates a medium dedicated to reproduction. As disclosed by appellants, a medium dedicated to reproduction can be identified by the absence of wobbled grooves and a recordable medium can be identified by the presence of wobbled grooves (spec. at 9-10).

The examiner finds that Linnartz does not disclose a wobbled groove detection unit, but that this is taught by Yokota (FR28). The examiner further finds that Fox explicitly teaches preventing piracy by rejecting disks if they lack wobbled grooves (FR28). The examiner concludes that it would have been obvious to include a wobble detection unit in Linnartz for detecting wobbled grooves, and to stop reproduction if the wobble detecting unit

does not detect wobbled grooves, for the stated advantage of limiting the reproduction of proprietary data (FR29; EA31-32).

This rejection does not rely on the combination of Linnartz and Doi, and, thus, require a separate analysis. Appellants argue that the examiner should have relied upon the underlying document of Fox rather than the abstract and have submitted a copy of the underlying Fox document in New Scientist (Br57-58). Appellants also note that Copeland et al. (Copeland), U.S. Patent 5,619,513, issued from PCT reference WO 96/41468 discussed in New Scientist. It is argued that the system in these references has the disk dedicated to reproduction with wobbled grooves and the recordable disk has no wobbled grooves, which is exactly the opposite of the situation in the independent claims.

The examiner states that "[t]here are many examples of things being done in both of two opposite ways, e.g. driving on the left in England, but on the right in America, or reading from left to right in English, but from right to left in Hebrew.... Thus, using a known means of conveying information to convey opposite information should be considered obvious and not grounds for patentability." (EA52.) Appellants reply that there must be some suggestion in the references or in the knowledge generally available to one of ordinary skill in the art to modify the reference to obtain the claimed invention and that the examiner

has not identified any such suggestion and has not established a prima facie case of obviousness (RBr22-23).

The reference in the rejection is the Fox abstract. Although the Board prefers to have the actual reference, this is because the abstract itself is prepared later, as in Chemical Abstracts, and is often not prior art. Abstracts also do not provide as much information as the underlying article. Nevertheless, since the Fox article and Copeland have been presented and argued, they will be considered in the rejection.

According to appellants' disclosure (spec. at 9-10), wobble is inherent and required in recorded media, but not in media dedicated to reproduction. With this in mind, we look at what Fox and Copeland teach. The Fox abstract discloses a wobble built into the spiral on the disk's surface which is used as a "signature" to identify an authentic disk. The Fox article and Copeland (Summary of the Invention) disclose that the distinctive wobble is compared to a signature to prove the authenticity of the disk; thus, not just any wobble will prevent reproduction. We have several problems with the rejection. First, the presence of wobble indicates an authentic disk, not necessarily a disk dedicated to reproduction. It is assumed that disks with the wobble signature are disks dedicated to reproduction since it takes a special machine to record the distinctive wobble. However, a pirate might be able to record from the authentic disk

and then press a copy on a medium dedicated to reproduction, but the recorded signal would not contain the wobble signature. Thus, absence of a wobble signature would indicate a pirate disk, not necessarily a recordable disk. Second, the fact that protected disks in Fox have a distinctive wobble signature does not imply that a recordable medium does not have wobbled grooves; appellants indicate that recorded media inherently have wobbled grooves which property has nothing to do with copy protection and the examiner has not shown differently. Fox and Copeland teach using a wobble signature to indicate a medium dedicated to reproduction, not the presence or absence of wobble. Thus, this is not case of merely reversing a convention as stated in the response to the arguments. Third, it is not apparent to us how Fox (or Copeland) would be combined with Linnartz to arrive at the claimed invention. Fox (and Copeland) disclose using the determination of a wobble signature on a medium dedicated to reproduction to allow reproduction, but do not rely on any signal that copying once was permitted. Since Linnartz does not use a determination of whether the medium is dedicated to reproduction to stop reproduction, it is not merely a matter of substituting the method of Fox into Linnartz. We conclude that the examiner has failed to establish a prima facie case of obviousness. The rejection of claims 12, 12, 34, and 35 is reversed.



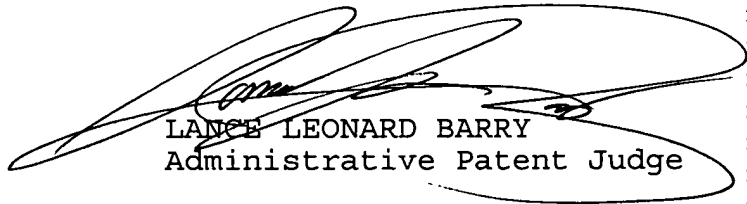
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CONCLUSION

The rejections of claims 1-16 and 24-38 are reversed.

REVERSED

  
LEE E. BARRETT  
Administrative Patent Judge )

  
LANCE LEONARD BARRY  
Administrative Patent Judge )

  
HOWARD B. BLANKENSHIP  
Administrative Patent Judge )

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